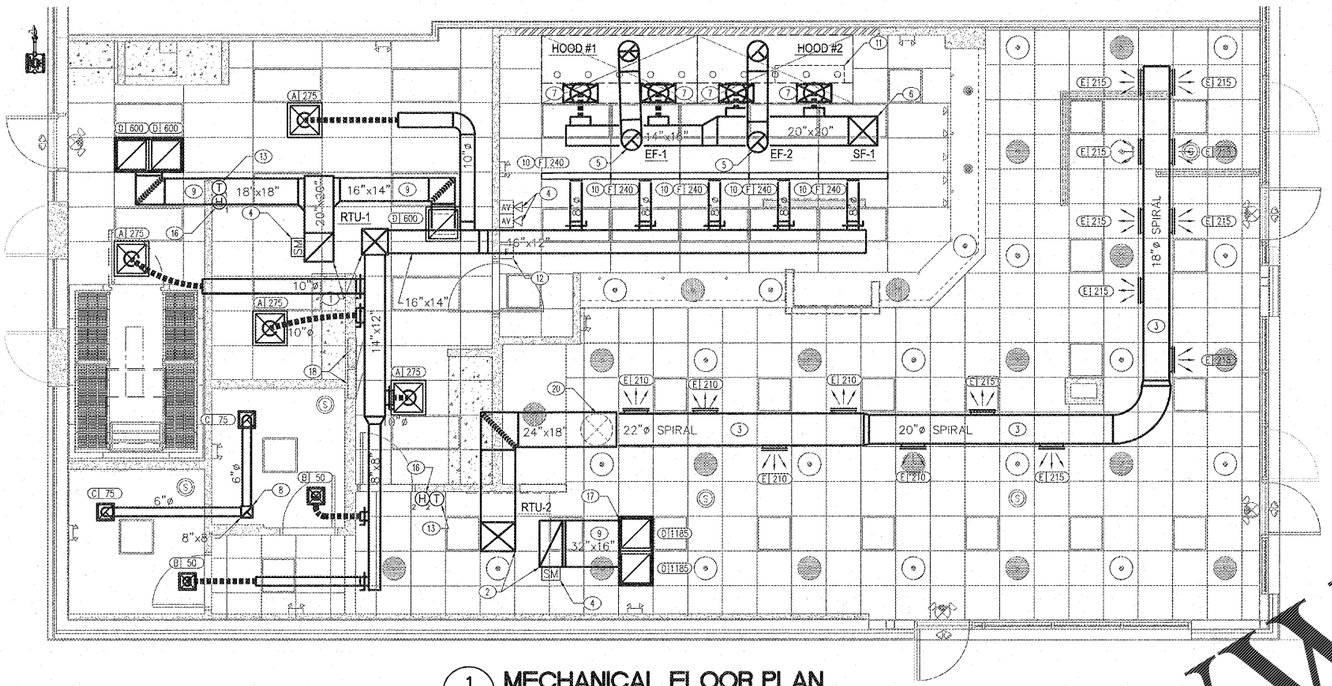
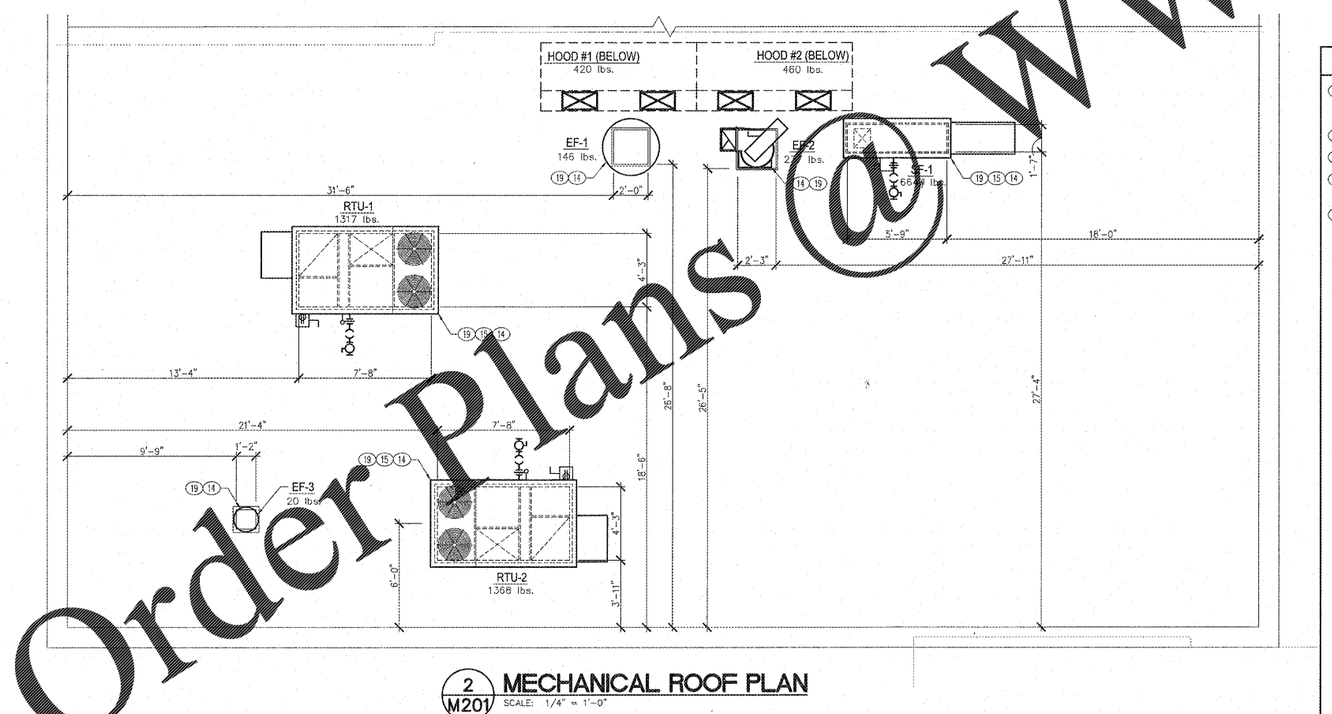


1 M201 **MECHANICAL FLOOR PLAN**
SCALE: 1/4" = 1'-0"



2 M201 **MECHANICAL ROOF PLAN**
SCALE: 1/4" = 1'-0"

NOTE:
ALL ROOF PENETRATION WORK TO BE PERFORMED BY OR APPROVED BY LANDLORD CONTRACTOR. ALL ROOF PENETRATIONS SHALL BE COORDINATED WITH EXISTING STRUCTURE PRIOR TO INSTALLATION OF THE ROOF CURBS. INSTALLER SHALL INSTALL PVC ROOF PROTECTION 5' AROUND KITCHEN GREASE FANS.

NOTE:
EXHAUST HOODS AND PSP'S ARE SHOWN ON ROOF PLAN FOR WEIGHT REFERENCE ONLY.

MECHANICAL LEGEND

- 24"x24" SUPPLY DIFFUSER
- 24"x24" RETURN GRILLE
- 12"x12" EXHAUST GRILLE
- EXHAUST RISER
- BRANCH DUCT, TAKE-OFF, (RECT.) WITH VOLUME DAMPER
- THERMOSTAT WITH RTU NUMBER DESIGNATION
- HUMIDITY SENSOR WITH RTU NUMBER DESIGNATION
- AUDIBLE/VISIBLE ALARM DEVICE
- MANUAL SUPPRESSION PULL STATION
- SUPPLY AIR DUCT ELBOW/RISER
- RIGID DUCTWORK
- CONCENTRIC TRANSITION
- ECCENTRIC TRANSITION
- TAP IN BRANCH DUCT WITH VOLUME DAMPER AND ROUND DUCT
- FLEX DUCT
- MECHANICAL CONTRACTOR GENERAL CONTRACTOR
- EQUIPMENT SYMBOL SEE SHEET M1 FOR SCHED.
- AIRFLOW (CFM)

GREASE EXHAUST DUCTWORK SPECIFICATION

A. ALL GREASE EXHAUST DUCTWORK SHALL BE CONSTRUCTED OF BLACK STEEL NOT LESS THAN 16 GAUGE UP TO 4 SQ. FT. AREA, 14 GA. ABOVE 4 SQ. FT. WITH CONTINUOUS GREASE-TIGHT AND WATER-TIGHT WELDS AT ALL JOINTS AND SEAMS. THE SYSTEM SHALL BE SO CONSTRUCTED THAT NO GREASE WILL BECOME POCKETED IN ANY PORTION THEREOF, BUT SHALL SLOPE AT NOT LESS THAN 1/4" PER FOOT OF HORIZONTAL LENGTH UNLESS 75 FEET LONG OR 1" PER FOOT IF OVER 75 FEET, BACK TO THE HOOD OR AS REQUIRED BY THE LOCAL AUTHORITIES.

B. OPENINGS IN DUCT SHALL CONFORM TO CODE REQUIREMENTS AND SHALL BE PROVIDED FOR COMPLETE AND THOROUGH CLEANING OF DUCT SYSTEM.

C. GREASE EXHAUST DUCT SHALL BE WRAPPED WITH TWO LAYERS OF 1-1/2" 3M FIRE BARRIER DUCT WRAP 615+ (ASTM E 2336) OR EQUIVALENT GREASE DUCT WRAP. INSTALL WRAP PER MANUFACTURER'S INSTRUCTIONS.

D. PROVIDE THE "PENETRATOR" GREASE DUCT CLEAN-OUT ACCESS DOORS MANUFACTURED BY FLAME GARD, INC. (OR EQUIVALENT) AT EVERY CHANGE OF DIRECTION IN THE DUCT, AT EACH FLOOR, AND/OR EVERY 10 FEET WITH MINIMUM OF 3 FEET OF CLEARANCE IN FRONT OF CLEAN-OUT.

GENERAL NOTES

1. IF ANY DISCREPANCIES ARE FOUND ON THE PLANS, THE CONTRACTOR SHALL BID AND INSTALL THE MORE CONSERVATIVE SPECIFICATION AND CALL ENGINEER FOR CLARIFICATION.
2. UNLESS NOTED OTHERWISE, ALL ITEMS ARE TO BE PROVIDED AND INSTALLED BY THE MECHANICAL CONTRACTOR.
3. FLEX DUCT LIMITED TO 6' IN LENGTH AND RESTRICTED TO CONNECTING SUPPLY DUCTS TO DIFFUSERS.
4. DUCT DIMENSIONS SHOWN ON PLANS ARE INSIDE CLEAR DIMENSIONS.
5. DUCT SHALL BE INSTALLED AS HIGH AS POSSIBLE BELOW TRUSSES UNLESS OTHERWISE NOTED.
6. ROOFTOP DIMENSIONS BASED ON SHELL STRUCTURAL DRAWINGS. CONTRACTOR SHALL FIELD VERIFY EXISTING STRUCTURE PRIOR TO INSTALLATION OF FANS AND ROOFTOP UNITS. NOTIFY ENGINEER OR ANY POTENTIAL CONFLICTS AND ADVISE OF POTENTIAL SOLUTIONS.

CONSTRUCTION NOTES (CONT'D)

(16) M.C. SHALL INSTALL HUMIDISTAT AT 48" A.F.F. ON WALL. LABEL EACH HUMIDITY SENSOR FOR EASY IDENTIFICATION. M.C. SHALL PROVIDE ALL REQUIRED CONTROL WIRING, J-BOX, AND TERMINATIONS.

(17) M.C. SHALL CONNECT RETURN DUCT INTO THE SIDE OF A 46"x22"x28" HIGH PLENUM.

(18) ELECTRICAL PANELS. NO DUCT SHALL BE ROUTED OVER ELECTRICAL PANELS.

(19) M.C. SHALL LABEL RTU'S, EF'S AND SF'S WITH RTU/EF/SF # (3" HIGH BLACK LETTERS) AS APPLICABLE, I.E. "RTU #1". ADD "MERV 13 FILTERS ONLY" UNDER THE RTU # LABEL.

(20) TAP OFF BOTTOM OF 24"x18" SUPPLY DUCT WITH 22"ø SPIRAL DUCT. SEE CONSTRUCTION NOTE 3 FOR SPIRAL DUCT SPECIFICATION.

CONSTRUCTION NOTES

(1) 18"x18" SUPPLY DUCT AND 20"x20" RETURN DUCT UP TO RTU-1 ON ROOF. TRANSITION AS REQUIRED IN THE VERTICAL POSITION TO DUCT OPENING AT THE UNIT. PROVIDE FLEXIBLE CONNECTION AND VIBRATION DAMPER AT CONNECTION TO UNIT. M.C. SHALL COORDINATE WITH EXISTING STRUCTURE PRIOR TO ROOF DECK PENETRATION.

(2) 24"x18" SUPPLY DUCT AND 22"x22" RETURN DUCT UP TO RTU-2 ON ROOF. TRANSITION AS REQUIRED IN THE VERTICAL POSITION TO DUCT OPENING AT THE UNIT. PROVIDE FLEXIBLE CONNECTION AND VIBRATION DAMPER AT CONNECTION TO UNIT. M.C. SHALL COORDINATE WITH EXISTING STRUCTURE PRIOR TO ROOF DECK PENETRATION.

(3) M.C. SHALL INSTALL LINX DOUBLE-WALL, POWDER COATED RED, EXPOSED SPIRAL DUCT AS HIGH AS POSSIBLE BELOW THE CEILING. M.C. SHALL COORDINATE DUCT ROUTING WITH MANUFACTURER TO AVOID LIGHT FIXTURES. DUCT COMES WITH REGISTERS ALREADY INSTALLED.

(4) SMOKE DETECTOR FACTORY INSTALLED IN RETURN AIR PORTION OF RTU. ACCESS SHALL BE PROVIDED FOR INSPECTION AND MAINTENANCE. M.C. SHALL VERIFY CODE REQUIREMENTS FOR SMOKE DETECTORS IN THE APPLICABLE CONFIGURATION. PROVIDE AUDIBLE/VISUAL ALARM DEVICES IN APPROVED LOCATION TO SIGNAL DUCT DETECTOR ACTIVATION. M.C. AND E.C. SHALL TEST AND VERIFY THE SMOKE DETECTION SYSTEM WORKS PROPERLY AND MEETS ALL LOCAL AND STATE CODE REQUIREMENTS. THE DUCT SMOKE DETECTORS SHALL BE TIED INTO THE BUILDINGS FACP, IF ONE EXISTS, AND INITIATE A SUPERVISORY SIGNAL UPON ACTIVATION.

(5) 14"ø EXHAUST DUCT UP TO EXHAUST FAN ON ROOF. FIELD VERIFY EXACT LENGTH. MAINTAIN DUCT SLOPE TOWARD HOOD. INSTALL AS PER NFPA, LOCAL AND STATE CODE. TRANSITION AS REQUIRED TO CONNECT TO EXHAUST CONNECTION ON HOOD. M.C. SHALL COORDINATE WITH EXISTING STRUCTURE PRIOR TO ROOF DECK PENETRATION.

(6) 14"x26" MAKE-UP AIR DUCT ROUTED UP TO SUPPLY FAN (SF-1) ON ROOF. TRANSITION AS REQUIRED IN THE VERTICAL POSITION TO OPENING AT THE UNIT. PROVIDE FLEXIBLE CONNECTION AND VIBRATION DAMPER AT CONNECTION TO FAN. M.C. SHALL COORDINATE WITH EXISTING STRUCTURE PRIOR TO ROOF DECK PENETRATION.

(7) BRANCH 14"ø DUCT WITH MANUAL VOLUME DAMPER FROM THE MAKE-UP AIR DUCT AND ROUTE TO PSP COLLARS AT THE HOODS.

(8) 8"x8" EXHAUST DUCT ROUTED UP TO EF-3 ON THE ROOF. TRANSITION AS REQUIRED TO CONNECT TO THE FAN. M.C. SHALL COORDINATE WITH EXISTING STRUCTURE PRIOR TO ROOF DECK PENETRATION.

(9) M.C. TO PROVIDE RIGID DUCT CONNECTIONS TO EXHAUST AND RETURN GRILLES, NO FLEX DUCT ALLOWED.

(10) M.C. SHALL INSTALL SLOT DIFFUSERS WITHIN CEILING GRID IN FRONT OF THE EXHAUST HOODS IN LOCATION SHOWN. SEE M101 SCHEDULE SHEET FOR MORE INFORMATION.

(11) ANSUL CABINET MOUNTED ON TOP OF HOOD #2. SEE HOOD SHEETS FOR REQUIREMENTS.

(12) M.C. SHALL INSTALL MANUAL SUPPRESSION FIRE PULL, PROVIDED BY HOOD SUPPLIER, AT LOCATION SHOWN. MOUNT FIRE PULL @ 48" A.F.F. (BETWEEN 10 AND 20 FEET FROM THE COOKING EQUIPMENT SERVED).

(13) M.C. SHALL INSTALL THERMOSTATS AT 48" A.F.F ON WALL. LABEL EACH THERMOSTAT FOR EASY IDENTIFICATION. M.C. SHALL PROVIDE ALL REQUIRED CONTROL WIRING, J-BOX, AND TERMINATIONS.

(14) ROOFTOP UNITS AND OTHER ROOFTOP EQUIPMENT SHALL BE INSTALLED BY THE TENANTS M.C. AND COORDINATED WITH THE G.C.

(15) FOR GAS AND CONDENSATE PIPING SEE DWG. P401.

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DRAWING: MECHANICAL FLOOR AND ROOF PLAN

Revisions

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Drawn By RJB

Checked By MJM

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